

REMARKS

Claims 52-54 and 57 are pending. Claim 52 has been amended. The amendments to claim 52 are fully supported by the specification, e.g., at page 10, lines 28-29. No new matter has been added.

Claims 52-54 and 57 have been rejected under 35 U.S.C. §103(a) as being obvious over utility model JP 1-72128 ('128). Applicants respectfully request withdrawal of this rejection for the following reasons.

Claim 52 is directed to an oral brush. As amended, the oral brush includes an elongated handle, a head portion sized for insertion into a human mouth extending from an end of the handle, and a brush portion. The brush portion includes (a) at least one molded elastomeric element extending a sufficient distance from the head portion to contact one or more teeth, and (b) a plurality of non-elastomeric bristles extending from said head portion. The molded elastomeric element includes a thermoplastic elastomer having a Shore A hardness of less than 55, and the thermoplastic elastomer includes a styrenic block copolymer. The molded elastomeric element extends upwardly from the head portion in substantially the same direction as at least some of the non-elastomeric bristles.

The '128 utility model generally discloses an oral cleaning implement employing filaments composed of an engineering elastomer. The engineering elastomer is a melt spinnable (i.e., extrudable) thermoplastic elastomer (see page 4, line 4 of the translation). The two general types of engineering elastomers disclosed in the '128 utility model are polyether-based thermoplastic elastomers and polystyrene-based thermoplastic elastomers. As specific examples of styrene-based thermoplastic elastomers, styrene-butadiene-styrene elastomer (when R = H) and styrene-isoprene-styrene elastomer (when R = CH₃) are disclosed (see page 4, lines 17 and 18 of the translation). All of the elastomeric bristles disclosed in the '128 utility model are melt spun (extruded), or melt spun and drawn (i.e., stretched).

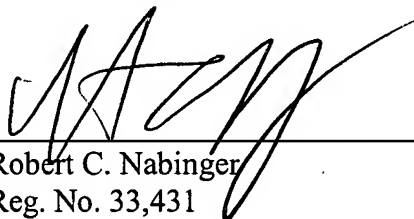
The '128 utility model does not disclose or suggest using molded elastomeric elements, as claim 1 now requires. Applicants note that it is known to persons of ordinary skill in the art that extruded bristles generally have better mechanical properties when compared to molded

bristles made of the same material due to differences in microstructure thought to arise from orientation imparted during extrusion. As an example, ordinary toothbrush bristles on the market today made of Nylon 6,12 are extruded and drawn (stretched). The extrusion and stretching imparts a vastly higher bristle bend recovery and a higher flexural modulus when compared to molded bristles. These improved properties are needed to make a toothbrush with acceptable wear resistance. Therefore, one of ordinary skill in the art would not have a reasonable expectation of success in making an acceptable oral brush by modification of the '128 utility model to include a molded elastomeric element, as now claimed. For at least these reasons, claim 52 and all dependent claims are non-obvious over the '128 utility model.

Applicants submit that all claims are in condition for allowance, an action that is respectfully requested.

It is not believed that any charges are due, but please apply any charges or credits to deposit account 06-1050, referencing Attorney Docket No. 00216-368004.

Respectfully submitted,



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